

m. shibuya

1635

PAGE: 1

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/227,881

DATE: 03/10/2000
TIME: 16:16:22

Input Set: I227881.RAW

This Raw Listing contains the General Information
Section and up to first 5 pages.

ENTERED

RECEIVED

MAR 27 2000

TC 1600 MAIL ROOM

<110> APPLICANT: Nguyen, Thai D.
Polansky, Jon R.
Chen, Pu
Chen, Hua
<120> TITLE OF INVENTION: Nucleic Acids, Kits, And Methods For The Diagnosis, Progn
<130> FILE REFERENCE: 07425.0057.US00
<140> CURRENT APPLICATION NUMBER: US/09/227,881
<141> CURRENT FILING DATE: 1999-01-11
<150> EARLIER APPLICATION NUMBER: US 08/938,669
<151> EARLIER FILING DATE: 1997-09-26
<160> NUMBER OF SEQ ID NOS: 36
<170> SOFTWARE: Microsoft Word 97
<210> SEQ ID NO 1
<211> LENGTH: 5300
<212> TYPE: DNA
<213> ORGANISM: Homo sapiens
<400> SEQUENCE: 1
atctttgttc agtttacctc agggctatta tgaaatgaaa tgagataacc aatgtgaaag 60
tcctataaac tgtatagcct ccattcggat gtatgtcttt ggcaggatga taaagaatca 120
ggaagaagga gtatccacgt tagccaagtg tccaggctgt gtctgtcttt attttagtga 180
cagatgttgc tcctgacaga agctattctt caggaaacat cacatccaat atggtaaate 240
catcaaacag gagctaagaa acaggaatga gatgggcact tgcccaagga aaaatgccag 300
gagagcaa ataatgatgaaa aataaacttt tccctttgtt tttaatttca ggaaaaaatg 360
atgaggacca aaatcaatga ataaggaaaa cagctcagaa aaaagatgtt tccaaattgg 420
taattaagta tttgttcctt gggaagagac ctccatgtga gcttgatggg aaaatgggaa 480
aaacgtcaaa agcatgatct gatcagatcc caaagtggat tattatttta aaaaccagat 540
ggcatcactc tggggaggca agttcaggaa ggcatgtta gcaaaggaca taacaataaac 600
agcaaaatca aaattccgca aatgcaggag gaaaatgggg actgggaaag ctttcataaac 660
agtgattagg cagttgacca tgttcgcaac acctccccgt ctataccagg gaacacaaaa 720
attgactggg ctaagcctgg actttcaagg gaaatatgaa aaactgagag caaaacaaaa 780
gacatggtta aaaggcaacc agaacattgt gagccttcaa agcagcagtg cccctcagca 840
gggaccctga ggcatttgcc tttaggaagg ccagttttct taaggaatct taagaaactc 900
ttgaaagatc atgaatttta accattttta gtataaaaaca aatatgcatg gcataatcag 960
tttagacatg ggtcccaatt ttataaagtc aggcatacaa ggataacgtg tcccagctcc 1020
ggataggtca gaaatcatta gaaatcactg tgtccccatc ctaacttttt cagaatgatc 1080
tgtcatagcc ctacacaca ggcccgatgt gtctgacctc caaccacatc tacaacccaa 1140
gtgectcaac cattgttaac gtgtcatctc agtaggtccc attacaaatg ccacctcccc 1200
tgtgcagccc atcccgctcc acaggaagtc tccccactct agacttctgc atcacgatgt 1260
tacagccaga agctccgtga gggtaggggt ctgtgtctta cacctacctg tatgtcttac 1320
acctgagctc actgcaacct ctgctcccca ggttcaagca attctcctgt ctgacctcc 1380
cgcgtagctg ggactacagg cgcacgcccg gctaattttt gtattgttag tagagatggg 1440
gtttcaccat attagccgg ctggtcttga actcctgacc tcaggatgat caccacctc 1500
agcctcctaa agtgcctggga ttacaggcat gagtccaccg gcccgcccaa gggtcagtgt 1560
ttaataagga ataacttgaa tggtttacta aaccaacagg gaaacagaca aaagctgtga 1620

PAGE: 2

RECEIVED

MAR 27 2000

TC 1600 MAIL ROOM

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/227,881

DATE: 03/10/2000

TIME: 16:16:22

Input Set: I227881.RAW

45	taattttcagg	gattcttggg	atggggaatg	gtgccatgag	ctgcctgcct	agtcccagac	1680
46	cactggtcct	catcactttc	ttccctcatc	ctcattttca	ggctaagtta	ccatttttatt	1740
47	caccatgctt	ttgtggtaag	cctccacatc	gttactgaaa	taagagtata	cataaactag	1800
48	ttccatttgg	ggccatctgt	gtgtgtgtat	aggggaggag	ggcatacccc	agagactcct	1860
49	tgaagcccc	ggcagaggtt	tcctctccag	ctgggggagc	cctgcaagca	cccggggtcc	1920
50	tgggtgtcct	gagcaacctg	ccagcccgtg	ccactggttg	ttttgttatc	actctctagg	1980
51	gacctgttgc	tttctatttc	tgtgtgactc	gttcattcat	ccaggcattc	attgacaatt	2040
52	tattgagtac	ttatatctgc	cagacaccag	agacaaaatg	gtgagcaaaag	cagtcactgc	2100
53	cctaccttcg	tggaggtgac	agtttctcat	ggaagacgtg	cagaagaaaa	ttaatagcca	2160
54	gccaacttaa	accagtgct	gaaagaaagg	aaataaacac	catcttgaag	aattgtgcgc	2220
55	agcatccctt	aacaaggcca	cctccctagc	gccccctgct	gcctccatcg	tgcccggagg	2280
56	cccccaagcc	cgagtcttcc	aagcctcctc	ctccatcagt	cacagcgctg	cagctggcct	2340
57	gcctcgcttc	ccgtgaatcg	tcctggtgca	tctgagctgg	agactccttg	gctccaggct	2400
58	ccagaaagga	aatggagagg	gaaactagtc	taacggagaa	tctggagggg	acagtgtttc	2460
59	ctcagaggga	aaggggcctc	cacgtccagg	agaattccag	gaggtggggg	ctgcagggag	2520
60	tggggacgct	ggggctgagc	gggtgctgaa	aggcaggaag	gtgaaaaggg	caaggctgaa	2580
61	gctggccaga	tggtcagtg	tggtcacggg	gctgggagtt	ttccgttgct	tcctgtgagc	2640
62	ctttttatct	tttctctgct	tggaggagaa	gaagtctatt	tcatgaaggg	atgcagtttc	2700
63	ataaagtcag	ctgttaaaat	tccagggtgt	gcatgggttt	tccttcacga	aggcctttat	2760
64	ttaatgggaa	tataggaagc	gagctcattt	cctaggccgt	taattcacgg	aagaagtgc	2820
65	tggagtcttt	tctttcatgt	cttctgggca	actactcagc	cctgtggtgg	acttggctta	2880
66	tgcaagacgg	tcgaaaacct	tggaaatcagg	agactcggtt	ttctttctgg	ttctgccatt	2940
67	ggttggctgt	gcgaccgtgg	gcaagtgtct	ctccttccct	gggccatagt	cttctctgct	3000
68	ataaagaccc	ttgcagctct	cgtgttctgt	gaacacttcc	ctgtgattct	ctgtgagggg	3060
69	ggatgttgag	aggggaagga	ggcagagctg	gagcagctga	gccacagggg	aggtggaggg	3120
70	ggacaggaag	gcaggcagaa	gctgggtgct	ccatcagtc	tcactgatca	cgtcagactc	3180
71	caggaccgag	agccacaatg	cttcaggaaa	gctcaatgaa	cccaacagcc	acattttcct	3240
72	tcctaagca	tagacaatgg	catttgccaa	taaccaaaaa	gaatgcagag	actaactggt	3300
73	ggtagctttt	gcctggcatt	caaaaactgg	gccagagcaa	gtggaaaatg	ccagagattg	3360
74	ttaaactttt	caccctgacc	agcaccctac	gcagctcagc	agtgactgct	gacagcacgg	3420
75	agtgcctgc	agcgcagggg	aggagaagaa	aaagagaggg	atagtgtatg	agcaagaaag	3480
76	acagattcat	tcaagggcag	tgggaattga	ccacagggat	tatagtccac	gtgatcctgg	3540
77	gttctaggag	gcagggctat	attgtggggg	gaaaaaatca	gttcaagggg	agtcgggaga	3600
78	cctgatttct	aatactatat	ttttccttta	caagctgagt	aattctgagc	aagtcacaag	3660
79	gtagtaactg	aggctgtaag	attacttagt	ttctccttat	taggaactct	ttttctctgt	3720
80	ggagttagca	gcacaagggc	aatcccgttt	cttttaacag	gaagaaaaa	ttcctaagag	3780
81	taaagccaaa	cagattcaag	cctaggtcct	gctgactata	tgattggttt	tttgaaaaat	3840
82	catttcagcg	atgtttacta	tctgattcag	aaaaatgagc	tagtaccctt	tggtcagctg	3900
83	taaacaacaa	cccatttgta	aatgtctcaa	gttcaggctt	aactgcagaa	ccaatcaaat	3960
84	aagaatagaa	tcttttagagc	aaactgtgtt	tctccactct	ggaggtgagt	ctgccagggc	4020
85	agtttgaaa	tatttacttc	acaagtattg	acactgttgt	tggtattaac	aacataaagt	4080
86	tgctcaaagg	caatcattat	ttcaagtggc	ttaaagtta	ttctgacagt	tttggtatat	4140
87	ttattggcta	ttgccatttg	ctttttgttt	tttctctttg	ggtttattaa	tgtaaaagcag	4200
88	ggattattaa	cctacagtcc	agaaagcctg	tgaatttgaa	tgaggaaaaa	attacatttt	4260
89	tgtttttacc	accttctaac	taaatttaac	attttattcc	attgcgaata	gagccataaa	4320
90	ctcaaagtgg	taataacagt	acctgtgatt	ttgtcattac	caatagaaat	cacagacatt	4380
91	ttatactata	ttacagtgtg	tgcagatacg	ttgtaagtga	aatattttata	ctcaaaacta	4440
92	ctttgaaatt	agacctcctg	ctggatcttg	tttttaacat	attaataaaa	catgttttaa	4500
93	attttgatat	tttgataatc	atatttcatt	atcatttggt	tcctttgtaa	tctatatatt	4560
94	atatatttga	aaacatcttt	ctgagaagag	ttccccagat	ttcaccaatg	aggttcttgg	4620

PAGE: 3

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/227,881

DATE: 03/10/2000

TIME: 16:16:22

Input Set: I227881.RAW

```

95      catgcacaca cacagagtaa gaactgattt agaggctaac attgacattg gtgcctgaga 4680
96      tgcaagactg aaattagaaa gttctcccaa agatacacag ttgtttttaa gctaggggtg 4740
97      aggggggaaa tctgccgctt ctataggaat gctctccctg gagcctggta ggggtgctgtc 4800
98      cttgtgttct ggctggctgt tatttttctc tgtccctgct acgtctttaa ggacttgttt 4860
99      ggatctccag ttcctagcat agtgcctggc acagtgcagg ttctcaatga gtttgcagag 4920
100     tgaatggaaa tataaactag aaatataatc ttgttgaaat cagcacacca gtagtcctgg 4980
101     tgtaagtgtg tgtacgtgtg tgtgtgtgtg tgtgtgtgtg tgtaaaacca ggtggagata 5040
102     taggaactat tattggggta tgggtgcata aattgggatg ttctttttta aaagaaactc 5100
103     caaacagact tctggaaggt tattttctaa gaatcttgct ggcagcgtga aggcaacccc 5160
104     cctgtgcaca gccccacca gcctcacgtg gccacctctg tcttccccca tgaagggtctg 5220
105     gctccccagt atatataaac ctctctggag ctcgggcatg agccagcaag gccacccatc 5280
106     caggcacctc tcagcacagc                                     5300
107     <210> SEQ ID NO 2
108     <211> LENGTH: 5304
109     <212> TYPE: DNA
110     <213> ORGANISM: Homo sapiens
111     <400> SEQUENCE: 2
112     atctttgttc agtttacctc agggctatta tgaaatgaaa tgagataacc aatgtgaaag 60
113     tcctataaac tgtatagcct ccattcggat gtatgtcttt ggcaggatga taaagaatca 120
114     ggaagaagga gtatccacgt tagccaagtg tccaggctgt gtctgctctt attttagtga 180
115     cagatgttgc tcctgacaga agctattctt caggaaacat cacatccaat atggtaaatc 240
116     catcaaacag gagctaagaa acaggaatga gatgggcact tgcccaagga aaaatgccag 300
117     gagagcaa ataatgatgaaa aataaacttt tccctttgtt tttaatttca ggaaaaaatg 360
118     atgaggacca aaatcaatga ataaggaaaa cagctcagaa aaaagatgtt tccaaattgg 420
119     taattaagta tttgttcctt gggaagagac ctccatgtga gcttgatggg aaaatgggaa 480
120     aaacgtcaaa agcatgatct gatcagatcc caaagtggat tattatttta aaaaccagat 540
121     ggcatacctc tggggaggca agttcaggaa ggtcatgtta gcaaaggaca taacaataac 600
122     agcaaaatca aaattccgca aatgcaggag gaaaatgggg actgggaaag ctttcataac 660
123     agtgattagg cagttgacca tgttcgcaac acctccccgt ctataccagg gaacacaaaa 720
124     attgactggg ctaagcctgg actttcaagg gaaatatgaa aaactgagag caaaacaaaa 780
125     gacatggtta aaaggcaacc agaacattgt gagccttcaa agcagcagtg cccctcagca 840
126     gggaccctga ggcatttgcc tttaggaagg ccagttttct taaggaatct taagaaactc 900
127     ttgaaagatc atgaatttta accattttta gtataaaaca aatatgcat gcataatcag 960
128     tttagacatg ggtcccaatt ttataaagtc aggcatacaa ggataacgtg tcccagctcc 1020
129     ggataggtca gaaatcatta gaaatcactg tgtccccatc ctaacttttt cagaatgatc 1080
130     tgtcatagcc ctacacaca ggcccgatgt gtctgacctt caaccacatc tacaacccaa 1140
131     gtgcctcaac cattgttaac gtgtcatctc agtaggtccc attacaaatg ccacctcccc 1200
132     tgtgcagccc atcccgtcc acaggaagtc tccccactct agacttctgc atcacgatgt 1260
133     tacagccaga agctccgtga gggtaggggt ctgtgtctta cacctacctg tatgtcttac 1320
134     acctgagctc actgcaacct ctgcctcca ggttcaagca attctcctgt ctcagcctcc 1380
135     cgcgtagctg ggactacagg cgcacgcccg gctaattttt gtattgttag tagagatggg 1440
136     gtttcaccat attagccgg ctggtcttga actcctgacc tcaggatgat caccacacct 1500
137     agcctcctaa agtgcctggg ttacaggcat gagtcaccgc gcccgccaa gggtcagtgt 1560
138     ttaataagga ataacttgaa tggtttagta aaccaacagg gaaacagaca aaagctgtga 1620
139     taatttcagg gattcttggg atggggaatg gtgccatgag ctgcctgcct agtcccagac 1680
140     cactggtcct catcacttct tccctcatc ctcatcttca ggctaagtta ccattttatt 1740
141     caccatgctt ttgtggtaag cctccacatc gttactgaaa taagagtata cataaactag 1800
142     ttccatttgg ggccatctgt gtgtgtgtat aggggaggag ggcatacccc agagactcct 1860
143     tgaagcccc ggagaggtt tcctctccag ctgggggagc cctgcaagca cccggggtcc 1920
144     tgggtgtcct gagcaacctg ccagcccgtg ccactgggtt ttttgttatc actctctagg 1980

```

PAGE: 4

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/227,881

DATE: 03/10/2000
TIME: 16:16:22

Input Set: I227881.RAW

```

145   gacctgttgc tttctatttc tgtgtgactc gttcattcat ccaggcattc attgacaatt 2040
146   tattgagtac ttatatctgc cagacaccag agacaaaatg gtgagcaaaag cagtcaactgc 2100
147   cctaccttcg tggaggtgac agtttctcat ggaagacgtg cagaagaaaaa ttaatatgcca 2160
148   gccaaacttaa acccagtgct gaaagaaagg aaataaacac catcttgaag aattgtgcgc 2220
149   agcatccctt aacaaggcca cctccctagc gccccctgct gcctccatcg tgcccgagg 2280
150   cccccaagcc cgagtcttcc aagcctcctc ctccatcagt cacagcgctg cagctggcct 2340
151   gcctcgcttc ccgtgaatcg tcctgggtgca tctgagctgg agactccttg gctccaggct 2400
152   ccagaaagga aatggagagg gaaactagtc taacggagaa tctggagggg acagtgtttc 2460
153   ctgagaggga aaggggcctc cacgtccagg agaattccag gaggtgggga ctgcaggagg 2520
154   tggggacgct ggggctgagc ggggtctgaa aggcaggaaag gtgaaaaggg caaggctgaa 2580
155   gctgcccaga tgttcagtgt tgttcacggg gctgggagtt ttccgttgct tcctgtgagc 2640
156   ctttttatct tttctctgct tggaggagaa gaagtcattt tcatgaaggg atgcagtttc 2700
157   ataaagtcag ctgttaaaat tccagggtgt gcatgggttt tccttcacga aggcctttat 2760
158   ttaatgggaa tataggaagc gagctcattt ctagggccgt taattcacgg aagaagtgc 2820
159   tggagtcttt tctttcatgt cttctgggca actactcagc cctgtggtgg acttggctta 2880
160   tgcaagacgg tcgaaaacct tggaaatcagg agactcggtt ttctttctgg ttctgccatt 2940
161   gggtggctgt gcgaccgtgg gcaagtgtct ctcttccct gggccatagt cttctctgct 3000
162   ataaagacct ttgcagctct cgtgttctgt gaacacttcc ctgtgattct ctgtgagggg 3060
163   ggatgttgag aggggaagga ggcagagctg gagcagctga gccacagggg aggtggaggg 3120
164   ggacaggaag gcaggcagaa gctgggtgct ccatcagtc tcatgatca cgtcagactc 3180
165   caggaccgag agccacaatg cttcaggaaa gctcaatgaa cccaacagcc acattttcct 3240
166   tccctaagca tagacaatgg catttgccaa taacccaaaaa gaatgcagag actaactgg 3300
167   ggtagctttt gcctggcatt caaaaactgg gccagagcaa gtggaaaatg ccagagattg 3360
168   ttaaaactttt caccctgacc agcaccacac gcagctcagc agtgactgct gacagcacgg 3420
169   agtgacctgc agcgaggggg aggagaagaa aaagagaggg atagtgtatg agcaagaaag 3480
170   acagattcat tcaagggcag tgggaattga ccacagggat tatagtccac gtgatcctgg 3540
171   gttctaggag gcagggtat attgtggggg gaaaaaatca gttcaaggga agtcgggaga 3600
172   cctgatttct aatactatat ttttccttta caagctgagt aattctgagc aagtcacaag 3660
173   gtagtaactg aggtgtgaag attacttagt ttctccttat taggaactct tttctctgt 3720
174   ggagttagca gcacaagggc aatcccgttt cttttaacag gaagaaaaca ttcctaagag 3780
175   taaagccaaa cagattcaag cctaggtctt gctgactata tgattggttt tttgaaaaat 3840
176   catttcagcg atgtttacta tctgattcag aaaatgagac tagtaccctt tggtcagctg 3900
177   taaacaaaaca cccatttgta aatgtctcaa gttcaggctt aactgcagaa ccaatcaaat 3960
178   aagaatagaa tcttttagagc aaactgtgtt tctccactct ggagggtgagt ctgccagggc 4020
179   agtttgaaaa tattttacttc acaagtattg acactgttgt tggattaaac aacataaagt 4080
180   tgctcaaagg caatcattat ttcaagtggc ttaaagttac ttctgacagt tttggtatat 4140
181   ttattggcta ttgccatttg ctttttgttt tttctctttg ggtttattaa tgtaaagcag 4200
182   ggattattaa cctacagtcc agaaaacctg tgaatttgaa tgaggaaaaa attacgtttt 4260
183   tatttttacc accttctaac taaatttaac attttattcc attgcgaata gagccataaa 4320
184   ctcaaagtgg taataagagt acctgtgatt ttgtcattac caatagaaat cacagacatt 4380
185   ttatactata ttacagttgt tgcaggtagc ttgtaagtga aatatttata ctcaaaacta 4440
186   ctttgaaatt agacctcctg ctggatcttg tttttaacat attaataaaa catgttttaa 4500
187   attttgatat tttgataatc atatttcatt atcatttggt tcctttgtaa tctatatatt 4560
188   atatatattg aaacatcttt ctgagaagag ttccccagat ttcaccaatg aggttcttgg 4620
189   catgcacaca cacagagtaa gaactgattt agaggctaac attgacattg gtgcctgaga 4680
190   tgcaagactg aaattagaaa gttctcccaa agatacacag ttgtttttaa gctaggggtg 4740
191   aggggggaaa tctgccgctt ctataggaat gctctccctg gagcctggta ggggtgctgc 4800
192   cttgtgttct ggctggctgt tatttttctc tgtccctgct acgtcttaaa ggacttgttt 4860
193   ggatctccag ttctagcat agtgccctggc acagtgcagg ttctcaatga gtttgagag 4920
194   tgaatggaaa tataaactag aaatatatct ttgttgaaat cagcacacca gtagtcctgg 4980

```

PAGE: 5

RAW SEQUENCE LISTING PATENT APPLICATION US/09/227,881

DATE: 03/10/2000

TIME: 16:16:22

Input Set: I227881.RAW

```

195      tgtaagtgtg tgtacgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg accaggtgga 5040
196      gatataggaa ctattattgg ggtatgggtg cataaattgg gatgttcttt ttaaaaaagaa 5100
197      actccaaaca gacttctgga aggttatattt ctaagaatct tgctggcagc gtgaaggcaa 5160
198      cccccctgtg cacagcccca cccagcctca cgtggccacc tctgtcttcc cccatgaagg 5220
199      gctggctccc cagtatatat aaacctctct ggagctcggg catgagccag caaggccacc 5280
200      catccaggca cctctcagca cagc                                     5304
201      <210> SEQ ID NO 3
202      <211> LENGTH: 6169
203      <212> TYPE: DNA
204      <213> ORGANISM: Homo sapiens
205      <400> SEQUENCE: 3
206      atctttgttc agtttacctc agggctatta tgaaatgaaa tgagataacc aatgtgaaag   60
207      tcctataaac tgtatagcct ccattcggat gtatgtcttt ggcaggatga taaagaatca   120
208      ggaagaagga gtatccacgt tagccaagtg tccaggctgt gtctgtctct atttttagtga   180
209      cagatgttgc tcctgacaga agctattctt caggaaacat cacatccaat atggtaaatc   240
210      catcaaacag gagctaagaa acaggaatga gatgggcact tgcccaagga aaaatgccag   300
211      gagagcaaat aatgatgaaa aataaaacttt tccttttgtt tttaatttca ggaaaaaatg   360
212      atgaggacca aaatcaatga ataaggaaaa cagctcagaa aaaagatgtt tccaaattgg   420
213      taattaagta tttgttcctt gggaagagac ctccatgtga gcttgatggg aaaatgggaa   480
214      aaacgtcaaa agcatgatct gatcagatcc caaagtggat tattatttta aaaaccagat   540
215      ggcatcactc tggggaggca agttcaggaa ggtcatgtta gcaaaggaca taacaataac   600
216      agcaaaatca aaattccgca aatgcaggag gaaaaatggg actgggaaag ctttcataac   660
217      agtgattagg cagttgacca tgttcgcaac acctccccgt ctataccagg gaacacaaaa   720
218      attgactggg ctaagcctgg actttcaagg gaaatatgaa aaactgagag caaaacaaaa   780
219      gacatggtta aaaggcaacc agaacattgt gagccttcaa agcagcagtg cccctcagca   840
220      gggaccctga ggcatttgcc tttaggaagg ccagttttct taaggaatct taagaaactc   900
221      ttgaaagatc atgaatttta accattttta gtataaaaca aatatgcat gcataatcag   960
222      tttagacatg ggtcccaatt ttataaagtc aggcatacaa ggataacgtg tcccagctcc 1020
223      ggataggtca gaaatcatta gaaatcactg tgtccccatc ctaacttttt cagaatgatc 1080
224      tgtcatagcc ctcacacaca ggcccgatgt gtctgacctc caaccacatc tacaacccaa 1140
225      gtgectcaac cattgttaac gtgtcatctc agtaggtccc attacaaatg ccacctcccc 1200
226      tgtgcagccc atcccgtcc acaggaaagtc tccccactct agacttctgc atcacgatgt 1260
227      tacagccaga agctccgtga gggtaggggt ctgtgtctta cacctacctg tatgtctctac 1320
228      acctgagctc actgcaacct ctgcctccca gggtcaagca attctctgt ctcagcctcc 1380
229      cgcgtagctg ggactacagg cgcacgcccc gctaattttt gtattgttag tagagatggg 1440
230      gtttcaccat attagcccggt ctggtcttga actcctgacc tcaggtgatc caccacacct 1500
231      agcctcctaa agtgcgtgga ttacaggcat gagtccaccg gcccgcccaa gggtcagtgt 1560
232      ttaataagga ataacttgaa tggtttacta aaccaacagg gaaacagaca aaagctgtga 1620
233      taatttcagg gattcttggg atggggaatg gtgccatgag ctgcctgcct agtcccagac 1680
234      cactggtcct catcactttc ttccctcatc ctcattttca ggctaagtta ccattttatt 1740
235      caccatgctt ttgtggtaag cctccacatc gttactgaaa taagagtata cataaactag 1800
236      ttccatttgg ggccatctgt gtgtgtgtat aggggaggag ggcatacccc agagactcct 1860
237      tgaagcccc ggagagggtt tcctctccag ctgggggagc cctgcaagca cccgggggtcc 1920
238      tgggtgtcct gagcaacctg ccagcccggt ccactgggtt tttgtttatc actctctagg 1980
239      gacctgttgc tttctatttc tgtgtgactc gttcattcat ccaggcattc attgacaatt 2040
240      tattgagtac ttatatctgc cagacaccag agacaaaatg gtgagcaaag cagtcaactgc 2100
241      cctaccttcg tggagggtgac agtttctcat ggaagacgtg cagaagaaaa ttaatagcca 2160
242      gccaaactta acccagtgtc gaaagaaagg aaataaacac catcttgaag aattgtgcgc 2220
243      agcatccctt aacaaggcca cctccctagc gccccctgt gctccatcg tgcccgagg 2280
          cccccaagcc cgagtcttcc aagcctcctc ctccatcagt cacagcgtg cagctggcct 2340

```

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Input Set: I227881.RAW

Line ? Error/Warning

Original Text

562 W "N" or "Xaa" used: Feature required

Ser Leu Gln Thr Leu Gln Thr Trp Asn Thr S

564 W "N" or "Xaa" used: Feature required

Pro Gly Xaa Ala Phe Ile Ile Cys Gly Thr C

568 W "N" or "Xaa" used: Feature required

Thr Tyr Glu Tyr Ile Asp Ile Pro Phe Gln A